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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,733	03/15/2004	Ralph Michael Fay	7388	1834

7590

04/27/2006

JOHNS MANVILLE  
Legal Department  
10100 West Ute Avenue  
Littleton, CO 80127

EXAMINER
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BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/801,733

**Applicant(s)**

FAY ET AL.

**Examiner**

Christopher P. Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-14, 31, 34-37, 50 and 53-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-14, 31, 34-37, 50 and 53-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

**WITHDRAWN REJECTIONS**

1. The double patenting rejections, 35 U.S.C. 112 rejections, 35 U.S.C. 102 rejections, and 35 U.S.C. 103 rejections of record in the previous Office Action mailed October 18, 2005, have been withdrawn due to Applicant's amendments and terminal disclaimer in the Paper filed March 17, 2006.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11-14, 31, 34-37, 50, and 53-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The limitation the 2-(4-Thiazolyl) Benzimidazole is present in the asphalt in "an amount between 200 and 2000ppm" is not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor, at the time the application was filed, had possession of the claimed invention. In Applicant's specification on page 8, it is taught that the sheet material as a whole, which includes the fibrous base sheet, contains between 200 and 2000ppm. Applicant's specification goes on to teach the grams of TBZ present per each 92.9 square meters of coating. Neither of these ranges describes specific parts per million range of TBZ in relation to the asphalt layer alone.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 12-14, 31, 34-37, 50, and 53-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation that the TBZ is present in the asphalt "in an amount between 200 and 2000ppm" renders the claims vague and

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indefinite because it is not understood what the parts per million ratios is based on. Is the TBZ present in an amount within the range claimed per the entire sheet material or only per the asphalt layer?

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 12-14, 31, and 60 are rejected under 35 U.S.C.

103(a) as being unpatentable over Yabusaki et al (JP 57-032508)

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in view of Gembala (US 2004/0166087 A1). Note that Yabusaki et al is cited based solely on Derwent's English abstract as provided with this Office Action in combination with a copy of the Japanese document.

Regarding claims 12, 13, and 60, Yabusaki et al teach asphalt containing sheet material comprising a fibrous base sheet formed of jute having a first major surface and a second major surface. A fungi resistant asphalt layer is coated on the first major surface of the fibrous base sheet, and the asphalt partially absorbs into the fibrous base sheet because the asphalt is applied melted and therefore, would absorb between the individual jute fibers. The fungi resistant asphalt consists of asphalt, a fungi growth-inhibiting agent comprising 2-(4-Thiazolyl) Benzimidazole present in the asphalt in an amount between 0.05% and 0.3% (see Derwent English abstract), which overlaps the claimed range.

Yabusaki et al fail to teach that the fungi resistant asphalt also consists of an essential oil odor-reducing additive. However, Gembala teaches that the need for odor reduction and masking in the asphalt compositions is well known in the construction industry, especially with regard to roofing materials (p.1, paragraph 4). Gembala further teaches that essential plant oil odor-reducing additives are added to asphalt

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in order to reduce and mask the odor of the asphalt composition (p.1, paragraph 7). Gembala also teaches that the fragrance is added in moderate amounts so as to not interfere with the performance or workability of the asphalt (p.1, Paragraph 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive to a asphalt used in the construction industry in order to reduce and mask the odor of the asphalt composition, as taught by Gembala, and that the amount of the additive would be optimized based on the amount needed to reduce and mask the odor without interfering with the performance of the asphalt, as taught by Gembala.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive in the amount claimed to the asphalt containing sheet material of Yabusaki et al in order to reduce and mask the odor of the asphalt composition as desired in the construction industry, as taught by Gembala. Furthermore, the amount of the additive would be selected by one having ordinary skill in the art after routine experimentation to determine the optimal amount desired to mask the odor without interfering with the performance or workability of the asphalt, as taught by Gembala.

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Regarding claim 14, the fibrous jute layer is wound around an armoring wire to form a jute layer prior to coating the outer surface with the asphalt layer, so the asphalt layer is only present on the outer surface making the inner second major surface essentially free of asphalt.

Regarding claim 31, the asphalt container sheet material consists essentially of the fibrous base sheet and the fungi resistant asphalt layer that is substantially coextensive with the first major surface of the fibrous base sheet.

9. Claims 11 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabusaki et al in view of Gembala as applied to claims 13 and 60 above, and further in view of Beilfuss et al (US 2001/0021711 A1).

Yabusaki et al and Gembala taken as a whole teach all that is claimed in claims 13 and 60 as presented above, but fail to explicitly teach that the fungi growth-inhibiting agent also includes zinc pyrithione. However, Beilfuss et al teach that when forming a microbiocidal composition, using one or more fungicides, zinc pyrithione is added to the composition in order to stabilize the composition (p.2, paragraph 22). One of ordinary skill in the art would have recognized that zinc pyrithione is added to fungicide containing compositions in



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order to stabilize the composition, as taught by Beilfuss et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add zinc pyrithione to the coating or impregnating composition of Yabusaki et al and Gembala in order to stabilize the fungicide composition, as taught by Beilfuss et al.

10. Claims 12-13, 31, 36-37, 50, 55, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony (USPN 6,309,456) in view of Owens (USPN 5,882,731) and Gembala (US 2004/0166087 A1).

Regarding claims 12, 13, 37, and 60, Anthony teaches asphalt containing sheet material comprising a fibrous base sheet containing a fungi resistant asphalt (col.1, 1.59-64). The asphalt layer is obviously on the first and/or second major surface and partially absorbs into the fibrous base sheet since Anthony teaches that asphalt layers in fiberglass based shingle systems are saturated with asphalt (col.1, 1.15-18). Anthony teaches that the asphalt layer consists of asphalt (col.2, 1.66-67) and fungi growth-inhibiting agent in an amount of up to 2% (col.5, 1.64 - col.6, 1.9), which overlaps the claimed range. Note that although Anthony teaches a three component asphalt it still meets the limitation of consisting of asphalt as claimed,

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because "asphalt" in Applicant's specification is defined as asphalt or modified asphalt (see p.3 of Applicant's specification).

Anthony fails to explicitly teach 2-(4-Thiazolyl) Benzimidazole as the fungi growth-inhibiting agent, but does teach Troysan Polyphase as an example of a fungi growth-inhibiting agent used, and teaches that any other suitable fungicide known in the art may be advantageously used in the asphalt (col.5, 1.64 - col.6, 1.9). Owens teaches that Metasol TK100, in which the active ingredient is 2-(4-Thiazolyl) Benzimidazole is a known substitute for Troysan Polyphase (col.5, 1.29-43). Therefore, it would have been obvious to one having ordinary skill in the art that 2-(4-Thiazolyl) Benzimidazole is a known substitute in the art for Troysan Polyphase, as taught by Owens.

Thus, it would have been obvious to one having ordinary skill in the art to substitute 2-(4-Thiazolyl) Benzimidazole for the Troysan Polyphase of Anthony, since Anthony teaches that any suitable fungicide known in the art is used as a substitute for Troysan Polyphase and Owens teaches that 2-(4-Thiazolyl) Benzimidazole is known in the art as a substitute for Troysan Polyphase. Furthermore, it has been held that it is obvious to one having ordinary skill in the art to substitute one known

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material for another known material depending on the intended end result of the product.

Anthony and Owens taken as a whole fail to teach that the fungi resistant asphalt also consists of an essential oil odor-reducing additive. However, Gembala teaches that the need for odor reduction and masking in the asphalt compositions is well known in the construction industry, especially with regard to roofing materials (p.1, paragraph 4). Gembala further teaches that essential plant oil odor-reducing additives are added to asphalt in order to reduce and mask the odor of the asphalt composition (p.1, paragraph 7). Gembala also teaches that the fragrance is added in moderate amounts so as to not interfere with the performance or workability of the asphalt (p.1, Paragraph 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive to a asphalt used in the art of roofing materials in order to reduce and mask the odor of the asphalt composition, as taught by Gembala, and that the amount of the additive would be optimized based on the amount needed to reduce and mask the odor without interfering with the performance of the asphalt, as taught by Gembala.

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Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive in the amount claimed to the asphalt containing sheet material of Anthony and Owens in order to reduce and mask the odor of the asphalt composition as desired in the construction industry, as taught by Gembala. Furthermore, the amount of the additive would be selected by one having ordinary skill in the art after routine experimentation to determine the optimal amount desired to mask the odor without interfering with the performance or workability of the asphalt, as taught by Gembala.

11. Claims 11, 34, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony in view of Owens and Gembala as applied to claims 13, 37, and 60 above, and further in view of Beilfuss et al (US 2001/0021711 A1).

Anthony, Owens, and Gembala taken as a whole teach all that is claimed in claims 13, 37, and 60 as presented above, but fail to explicitly teach that the fungi growth-inhibiting agent also includes zinc pyrithione. However, Beilfuss et al teach that when forming a microbiocidal composition, using one or more fungicides, zinc pyrithione is added to the composition in order to stabilize the composition (p.2, paragraph 22). One of

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ordinary skill in the art would have recognized that zinc pyrithione is added to fungicide containing compositions in order to stabilize the composition, as taught by Beilfuss et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add zinc pyrithione to the coating or impregnating composition of Anthony, Owens, and Gembala in order to stabilize the fungicide composition, as taught by Beilfuss et al.

12. Claims 14 and 56-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony in view of Owens and Gembala as applied to claim 13 above, and further in view of Greaves, Jr. et al (US 2004/0014385 A1).

Regarding claim 14, Anthony, Owens, and Gembala taken as a whole teach all that is claimed in claim 13 as presented above, but fail to explicitly teach that the second major surface of the fibrous base sheet is essentially free of asphalt. Anthony teaches that the fibrous base sheet is conventionally saturated with Asphalt, which obviously includes asphalt on both major surfaces of the fibrous base sheet. However, Greaves, Jr. et al teaches that in addition to the conventional method of submerging fibrous base sheets into asphalt to saturate the sheet, other methods of applying asphalt to the base sheet

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includes coating only the upper surface or first major surface of the base sheet, because if the lower surface is coated with asphalt the roofing material may stick to an adjacent shingle when shingles are stacked or packaged in a bundle (p.3, paragraph 34). Therefore, it would have been obvious to one having ordinary skill in the art to coat the base sheet of asphalt shingles only on the upper first major surface with asphalt so that the lower second major surface remains essentially free of asphalt, so that the lower surface will not stick to adjacent shingles in a bundle, as taught by Greaves, Jr. et al.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to coat the asphalt of Anthony, Owens, and Gembala only on the upper first major surface, therefore rendering the lower second major surface essentially free of asphalt, so that the lower surface will not stick to adjacent shingles in a bundle, as taught by Greaves, Jr. et al.

Regarding claim 56, Anthony teaches asphalt containing sheet material comprising a fibrous base sheet containing fungi resistant asphalt (col.1, 1.59-64). The asphalt layer is obviously on the first and/or second major surface and partially absorbs into the fibrous base sheet since Anthony teaches that

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asphalt layers in fiberglass based shingle systems are saturated with asphalt (col.1, 1.15-18). Anthony teaches that the asphalt layer consists of asphalt (col.2, 1.66-67) and fungi growth-inhibiting agent in an amount of up to 2% (col.5, 1.64 - col.6, 1.9), which overlaps the claimed range. Note that although Anthony teaches a three component asphalt it still meets the limitation of consisting of asphalt as claimed, because "asphalt" in Applicant's specification is defined as asphalt or modified asphalt (see p.3 of Applicant's specification).

Anthony fails to explicitly teach 2-(4-Thiazolyl) Benzimidazole as the fungi growth-inhibiting agent, but does teach Troysan Polyphase as an example of a fungi growth-inhibiting agent used, and teaches that any other suitable fungicide known in the art may be advantageously used in the asphalt (col.5, 1.64 - col.6, 1.9). Owens teaches that Metasol TK100, in which the active ingredient is 2-(4-Thiazolyl) Benzimidazole, is a known substitute for Troysan Polyphase (col.5, 1.29-43). Therefore, it would have been obvious to one having ordinary skill in the art that 2-(4-Thiazolyl) Benzimidazole is a known substitute in the art for Troysan Polyphase, as taught by Owens.

Thus, it would have been obvious to one having ordinary skill in the art to substitute 2-(4-Thiazolyl) Benzimidazole for

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the Troysan Polyphase of Anthony, since Anthony teaches that any suitable fungicide known in the art is used as a substitute for Troysan Polyphase and Owens teaches that 2-(4-Thiazolyl) Benzimidazole is known in the art as a substitute for Troysan Polyphase. Furthermore, it has been held that it is obvious to one having ordinary skill in the art to substitute one known material for another known material depending on the intended end result of the product.

Anthony and Owens taken as a whole fail to teach that the fungi resistant asphalt also consists of an essential oil odor-reducing additive. However, Gembala teaches that the need for odor reduction and masking in the asphalt compositions is well known in the construction industry, especially with regard to roofing materials (p.1, paragraph 4). Gembala further teaches that essential plant oil odor-reducing additives are added to asphalt in order to reduce and mask the odor of the asphalt composition (p.1, paragraph 7). Gembala also teaches that the fragrance is added in moderate amounts so as to not interfere with the performance or workability of the asphalt (p.1, Paragraph 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive to a asphalt used in the art of roofing materials in



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order to reduce and mask the odor of the asphalt composition, as taught by Gembala, and that the amount of the additive would be optimized based on the amount needed to reduce and mask the odor without interfering with the performance of the asphalt, as taught by Gembala.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive in the amount claimed to the asphalt containing sheet material of Anthony and Owens in order to reduce and mask the odor of the asphalt composition as desired in the construction industry, as taught by Gembala. Furthermore, the amount of the additive would be selected by one having ordinary skill in the art after routine experimentation to determine the optimal amount desired to mask the odor without interfering with the performance or workability of the asphalt, as taught by Gembala.

Anthony, Owens, and Gembala taken as a whole fail to teach the base sheet being formed of a nonfibrous polymeric film base sheet formed of polyester or polycarbonate. However, Greaves, Jr. et al teach that base sheets in the formation of asphalt shingles are chosen so that the substrate is effective to improve the impact resistance of the roofing material. Greaves, Jr. et al also teach that glass mats, such as the fibrous base

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sheet of Anthony, are limited in making shingles with improved impact resistance because of the limited elongation properties of the mat (p.2, paragraph 28). Greaves, Jr. et al goes on to teach that a preferred replacement for the conventional fiberglass mats is a nonfibrous polymeric sheet web made of polyester (p.3, paragraph 32). Therefore, it would have been obvious to one having ordinary skill in the art that a nonfibrous polymer sheet web made of polyester is substituted for a fibrous glass mat in the formation of asphalt shingles and roofing material, in order to provide the roofing material with improved impact resistance and improved bonding to the asphalt coating, as taught by Greaves, Jr. et al on page 2, paragraphs 28 and 29.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to replace the fibrous glass base sheet of Anthony, Owens, and Gembala, with the nonfibrous polymeric web base sheet made from polyester of Greave, Jr. et al, in order to provide the roofing material with improved impact resistance and bonding to the asphalt coating, as taught by Greaves, Jr. et al.

Regarding claims 57-59, Greaves, Jr. et al teach that the fungi resistant asphalt layer is applied to one surface or both surfaces either by coating or submersion, which obviously lead

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to partial absorption into the polymeric film (p.3, paragraph 34).

13. Claims 12-14, 31, 35-37, 50, 54-55, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janoski et al (USPN 5,253,461) in view of Owens (USPN 5,882,731) and Gembala (US 2004/0166087 A1).

Regarding claims 12, 13, 37, and 60, Janoski et al teach asphalt containing sheet material (represented by the insulation adhesive and roofing insulation). The sheet material comprises the roofing insulation, which is a fibrous base sheet having first and second major surfaces, and insulation adhesive, which is present on the first major surface of the fibrous base sheet and partially absorbed therein or on the first and second major surfaces and partially absorbed therein (col.4, 1.38-53). The roofing insulation is a fibrous base sheet since it is formed of vegetable fiberboards, glass fiber, or wood fiberboard (col.5, 1.22-26). The insulation adhesive is a fungi resistant asphalt consisting of asphalt (col.6, 1.40-45) and a fungi growth-inhibiting agent (col.14, 1.10-16). Note that although Anthony teaches a three component asphalt, it still meets the limitation of consisting of asphalt as claimed, because "asphalt" in

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Applicant's specification is defined as asphalt or modified asphalt (see p.3 of Applicant's specification).

Janoski et al fail to explicitly teach 2-(4-Thiazolyl) Benzimidazole as the fungi growth-inhibiting agent. Owens teaches that Metasol TK100, in which the active ingredient is 2-(4-Thiazolyl) Benzimidazole is a known fungi growth-inhibiting agent (col.5, 1.29-43). Owens also teaches that fungi growth-inhibiting agents are added in amounts of at least about 0.05%, in order to be effective (col.6, 1.66-67), which overlaps the claimed range. Therefore, it would have been obvious to one having ordinary skill in the art that 2-(4-Thiazolyl) Benzimidazole is a known fungicide for incorporation in films for inhibiting growth of fungi, as taught by Owens.

Thus, it would have been obvious to one having ordinary skill in the art to use 2-(4-Thiazolyl) Benzimidazole in an amount within the claimed range as the fungicide in Janoski et al, since Owens teaches that 2-(4-Thiazolyl) Benzimidazole is known in the art for the particular purpose of incorporation in films for inhibiting growth of fungi and is added in an amount greater than 0.05%, and one of ordinary skill in the art would select a known fungicide for its particular purpose when choosing a fungicide to use in Janoski et al, absent the showing of unexpected result.

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Janoski et al and Owens taken as a whole fail to teach that the fungi resistant asphalt also consists of an essential oil odor-reducing additive. However, Gembala teaches that the need for odor reduction and masking in the asphalt compositions is well known in the construction industry, especially with regard to roofing materials (p.1, paragraph 4). Gembala further teaches that essential plant oil odor-reducing additives are added to asphalt in order to reduce and mask the odor of the asphalt composition (p.1, paragraph 7). Gembala also teaches that the fragrance is added in moderate amounts so as to not interfere with the performance or workability of the asphalt (p.1, Paragraph 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive to a asphalt used in the art of roofing materials in order to reduce and mask the odor of the asphalt composition, as taught by Gembala, and that the amount of the additive would be optimized based on the amount needed to reduce and mask the odor without interfering with the performance of the asphalt, as taught by Gembala.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add an essential plant oil odor-reducing additive in the amount

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claimed to the asphalt containing sheet material of Janoski et al and Owens in order to reduce and mask the odor of the asphalt composition as desired in the construction industry, as taught by Gembala. Furthermore, the amount of the additive would be selected by one having ordinary skill in the art after routine experimentation to determine the optimal amount desired to mask the odor without interfering with the performance or workability of the asphalt, as taught by Gembala.

14. Claims 11, 34, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janoski et al in view of Owens and Gembala as applied to claims 13, 37, and 60 above, and further in view of Beilfuss et al (US 2001/0021711 A1).

Janoski et al, Owens, and Gembala taken as a whole teach all that is claimed in claims 13, 37, and 60 as presented above, but fail to explicitly teach that the fungi growth-inhibiting agent also includes zinc pyrithione. However, Beilfuss et al teach that when forming a microbiocidal composition, using one or more fungicides, zinc pyrithione is added to the composition in order to stabilize the composition (p.2, paragraph 22). One of ordinary skill in the art would have recognized that zinc pyrithione is added to fungicide containing compositions in order to stabilize the composition, as taught by Beilfuss et al.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add zinc pyrithione to the coating or impregnating composition of Janoski et al, Owens, and Gembala in order to stabilize the fungicide composition, as taught by Beilfuss et al.

#### ***Response to Arguments***

15. Applicant's arguments with respect to claims 1-59 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Terminal Disclaimer***

16. The terminal disclaimer filed on March 17, 2005 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of any patent granted on Application Number 10/801,734 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peng et al (US 2001/0009834 A1); Shoshany et al (US 2005/0089653 A1).

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18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be



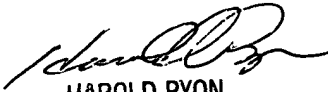
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reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB *CPB*  
April 25, 2006

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

*4/26/06*